30. SOME NEW HOSTS FOR *DENDROPHTHOE FALCATA* (LINN.F.) ETTINGH (*LORANTHUS LONGIFLORUS* DESR.)

One of the characteristic features of *Dendrophthoe falcata* (Linn.f.) Ettingh is its non-specificity in the selection of host plants (Fischer 1926, Sambandam 1966, Sampathkumar and Kunchithapatham 1969, Sampathkumar 1970). Although the selection of host plants is entirely at random, experimental evidence indicates that this parasite has its own spectrum of hosts controlled by some factors one of which seems to be osmotic pressure relationships between the host and the parasite. Evidence in support of this concept has been gained recently by the study of osmotic pressures of the different hosts as compared with the parasite. Interestingly, despite the large number of host plants recorded so far for this parasite, the monocots have been excluded completely and there is but a single report (Fischer 1926) of a gymnosperm host (i.e. *Pinus longifolia* Roxb.). In an earlier communication (Sampathkumar 1970) it was pointed out that the seeds of *D. falcata* germinate initially forming a massive haustorium in all the 'host' plants, but the fate was decided only when the haustorium penetrated the host tissue.

In the present paper, sixteen new hosts species have been listed from this locality, as given below :

1. *Atalantia monophylla* (Roxb.) DC.— Rutaceae
2. *Swietenia macrophylla* King.— Meliaceae
3. *Sesbania grandiflora* Pers.— Papilionaceae
4. *Crotalaria striata* DC.— Papilionaceae
5. *Cassia marginata* Roxb.— Caesalpiniaceae
6. *Rhizophora candelaria* DC.— Rhizophoraceae
7. *R. mucronata* Lamk.— Rhizophoraceae
8. *Acacia cunninghamii* Hook.— Mimosaceae
9. *Chomelia asiatica* O. Kze.— Rubiaceae
10. *Mimusops roxburghiana* Wt.— Sapotaceae
11. *Ervatamia coronaria* Stapf— Apocynaceae
12. *Nerium indicum* Mill— Apocynaceae
13. *Argyreia bella* (C. B. Clarke) Raizada— Convolvulaceae
14. *Excoecaria agallocha* Linn.— Euphorbiaceae
15. *Codiaeum variegatum* (L.) Bl.— Euphorbiaceae
16. *Jatropha gossypifolia* Linn.— Euphorbiaceae

While fifteen of the new hosts observed here belong to the ten families of dicots reported earlier, one new family (i.e. Convolvulaceae) has been added to the existing number of host families. Experimental observations are still well under way and it is hoped that some more new host species are likely to appear in future.

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